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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/721,787	11/26/2003	Harry Hedler	543822002200	4141
25227	7590	09/20/2005		
MORRISON & FOERSTER LLP 1650 TYSONS BOULEVARD SUITE 300 MCLEAN, VA 22102			EXAMINER PERKINS, PAMELA E	
			ART UNIT	PAPER NUMBER
			2822	

DATE MAILED: 09/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/721,787

Applicant(s)

HEDLER ET AL.

Examiner

Pamela E. Perkins

Art Unit

2822

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) 1-7 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 11/26/03 10/29/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

This office action is in response to the filing of the election on 8 July 2005.

Claims 1-10 are pending.

Information Disclosure Statement

The information disclosure statement filed 29 October 2004 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.

Election/Restrictions

Applicant's election without traverse of group II, claims 8-10, in the reply filed on 8 July 2005 is acknowledged.

Claims 1-7 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected group I, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 8 July 2005.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Henle et al. (4,266,282) in view of Kinsman (6,380,630).

Henle et al. disclose a method for producing semiconductor components where electrical lines (12/57) are printed on main sides semiconductor chips (10/50) such that the lines (12/57) run from contact points of the semiconductor chips (10/50) beyond lower edges of the main sides onto base sides of the semiconductor chips (10/50); and fitting the chip on a carrier board (11/65) such that main planes of the semiconductor chips (10/50) run perpendicular to the carrier board (11/65) (Fig. 1, 7A & 7b; col. 3, lines 36-47; col. 7, lines 54-66; col. 8, lines 20-31).

Henle et al. do disclose producing a chip composite by adhesively bonding together non-printed main sides of two semiconductor chips.

Kinsman discloses a method for producing semiconductor components including producing a chip composite (10) by adhesively bonding together non-printed main sides of two semiconductor chips (12a, 12b); and fitting the chip composite (10) on a carrier board (40) such that main planes of the semiconductor chips (12a, 12b) run perpendicular to the carrier board (40) (Fig. 1 & 3b; col. 4, lines 52-65).

Since Henle et al. and Kinsman are both from the same field of endeavor, a method for producing semiconductor components, the purpose disclosed by Kinsman would have been recognized in the pertinent art of Henle et al. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to

modify Henle et al. by producing a chip composite by adhesively bonding together non-printed main sides of two semiconductor chips as taught by Kinsman to create a device with low impedance (col. 3, lines 11-15).

Referring to claim 9, Kinsman discloses introducing an adhesive (13) between the main sides of the semiconductor chips (12a, 12b); and bringing together the semiconductor chips (12a, 12b) in an adhesive bonding mold such that an at least partial encapsulation of the chip composite (10) is produced (fig. 1; col. 4, lines 52-65).

Referring to claim 10, Henle et al. disclose wherein the fitting of the chip (10/50) comprises production of soldered connections between the printed lines (12/57) and contact areas (13) of the carrier board (11/57) (col. 3, lines 36-47).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Stoller (6,392,896) discloses a method for producing semiconductor components where electrical lines are printed on main sides of semiconductor chips such that the lines run from contact points of the semiconductor chips beyond lower edges of the main sides onto base sides of the semiconductor chips; and fitting the chip composite on a carrier board such that main planes of the semiconductor chips run perpendicular to the carrier board.

Kinsman (6,800,942) discloses a method for producing semiconductor components including producing a chip composite by adhesively bonding together non-printed main sides of two semiconductor chips; and fitting the chip composite on a

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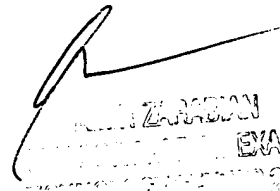
carrier board such that main planes of the semiconductor chips run perpendicular to the carrier board.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pamela E. Perkins whose telephone number is (571) 272-1840. The examiner can normally be reached on Monday thru Friday, 8:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amir Zarabian can be reached on (571) 272-1852. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PEP


AMIR ZARABIAN
EXAMINER
(571) 272-1852